ISOLATION AND IDENTIFICATION OF *Lactobacillus* sp. FROM DAIRY PRODUCTS USING PCR METHOD

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TABLE OF CONTENTS

ABSTRACT

ISOLATION AND IDENTIFICATION OF *Lactobacillus* sp. FROM DAIRY PRODUCTS USING PCR METHOD

Lactobacilli are gram positive, facultative bacteria which convert lactose and simple sugars to lactic acid. Species belonging to the genus *Lactobacillus* are used specifically in dairy products. The main purpose of this study was to isolate the *Lactobacillus* sp. from the dairy product samples and to identify *Lactobacillus* sp. in dairy product samples by using PCR method. A total of four samples from dairy products which are yogurt, vitagen, yakult, goat milk and three *Lactobacillus* sp. strains were used in this study. Dairy product samples were purchased at Econsave supermarket and *Lactobacillus* strains were obtained from Makmal Halal UNISEL, Selangor. Streak plate method was carried out on MRS agar plates to isolate *Lactobacillus* sp. from the samples. The genomic DNA from these samples were extracted using RTP® Bacteria DNA Mini Kit and were subjected to PCR amplification for the detection *of Lactobacillus* species using specific primers. All samples showed positive result of DNA band on agarose gel electrophoresis. The extraction DNA method using RTP® Bacteria DNA Mini Kit is suggested for high quality and more reliable result.